Fluid Aspiration and Drainage: A Guide for Patients

**What is a fluid aspiration and drainage?**

A fluid aspiration and drainage is a medical procedure in which a needle is passed through the skin, using image guidance (CT scan/X-ray/Ultrasound), into an abnormal fluid collection in order to remove the fluid. Some patients have all their fluid drained at one time or just a sample taken. Other patients are discharged with a drainage catheter in place.

**When should I have a Fluid Aspiration and Drainage procedure?**

Aspiration and drainage is usually recommended when abnormal fluid collections are present in the body and are believed to be causing significant symptoms. Examples include empyemas (infected fluid around the lung) and abdominal abscesses that develop after surgery or from diverticulitis complications.

A small sample of the fluid that is collected during the procedure will be sent to the lab for analysis. This will help your doctor determine the best treatment for you.

**Is it safe?**

The technique of fluid collection and drainage is performed in the Imaging Department by one of our specially trained radiologists. When performed by a trained and experienced radiologist, it is a safe technique. As with any other invasive procedure, certain complications and side effects can occur. These will be explained to you in detail before you give your consent to proceed.

**Will it hurt?**

The radiologist will use a local anesthetic (numbing medication similar to Novacaine used by dentists). You may feel some pressure during the procedure, but most patients experience minimal discomfort with the use of a local anesthetic. If needed your nurse can administer pain medication through your IV and, although rarely used, you may be given medication through the IV to help you relax.

After the fluid is removed, patients may immediately become more comfortable than before.

Reference based on 2006 American Radiology Nurses Association guidelines
What will happen during the procedure?

Upon arriving to the imaging department, you will meet the staff that will be working with you. You will have a Registered Nurse and 1-2 technologists specially trained in the area where your procedure will be done. The radiologist will explain the procedure, including the benefits and the risks, and then obtain a written consent after all your questions have been answered. You will have some initial imaging pictures taken for the radiologist to view before your procedure begins.

Once the procedure begins, your skin will be cleaned with an antiseptic solution and sterile towels are placed over the area to avoid infection. Local anesthetic (numbing medication) is injected into the skin. Once the area is numb, the radiologist passes a special type of needle through the skin into the area of abnormality. At this time, you may have more imaging pictures taken. These pictures will assure the radiologist that the needle is in the exact location of the abnormal fluid.

Some of the fluid will be removed and examined to see whether or not it is infected. If the fluid is infected, the radiologist may exchange the needle for a small catheter (a tube with multiple drainage holes) to be left in place in order to continue the drainage process over the next few days.

How does this technique work? What does the radiologist see?

The radiologist is able to use CT scan/X-ray/Ultrasound monitors to guide the needle through the skin into the fluid collection. The ability to see the structures inside the body during needle passage permits the radiologist to accurately place the needle and avoid adjacent organs.

What happens after the procedure?

You will be taken back to your room for observation for approximately 2-5 hours. A registered nurse will monitor your vital signs and observe for any complications. A light meal will be given when you return to your room. You will go home after the observation period. A ride home is required only if medication was given to you through your IV during the procedure.
How will I learn the results?

Immediately after the procedure, the sample(s) will be taken to the pathologist for analysis. Some initial results may be available to your doctor within 24 hours, but for the complete analysis results, it will usually take 3 days. Your doctor who ordered the procedure will get the results as soon as they are available and can relay them to you.

What if I have other questions?

If you have any questions, concerns, or need to reschedule your appointment, you may call (310) 784-6320 M-F from 8:00 am - 4:30 pm and speak to an Imaging RN.